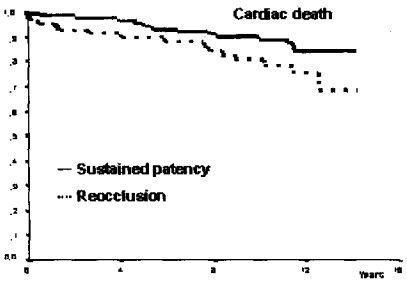
sion had occurred asymptomatically.
Conclusions: After demonstrated coronary patency following fibrinolytic therapy, patients who survived the first 48 hours had an excellent 10-year prognosis. Whereas reocclusion was associated with a markedly increased risk of cardiac mortality, even in case of asymptomatic reocclusion, all cause mortality did not differ from patients with sustained patency.



1072-101 Management and Outcomes of Patients With Acute Coronary Syndromes: One-Year Results From the Canadian Acute Coronary Syndrome Registry

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Background: While clinical trials provide evidence for the management of acute coronary syndromes (ACS), these results may not be applicable to a wider patient population. There are limited data regarding the actual management and outcomes of patients discharged from hospitals following an ACS.
Methods: The ACS Registry is a prospective Canadian observational study of 5312 patients with suspected ACS from 51 centres in 9 provinces. A final diagnosis of ACS was determined in 4627 patients (87.1%). Vital status at 1-year was available for 4329 patients (6% lost to follow-up). Non-fatal cardiac events (myocardial infarction=MI; unstable angina=UA), angiography, and revascularization (percutaneous coronary intervention=PCI; coronary bypass surgery=CABG) after discharge (via standardized telephone interview) were recorded for 3844 hospital discharge survivors at 1-year follow-up.
Results: One-year cumulative mortality was 9.2%. Treatment and unadjusted outcomes post-discharge for 3844 hospital survivors, classified by index discharge ACS diagnosis, were as follows:

Post-discharge to 1 year	All patients	Q Wave MI (27%)	Non-Q MI (32%)	UA (41%)
Death	7.2%	6.5%	10%*	5.4%
(re) MI	2.9%	2.7%	3.7%	2.6%
Unstable Angina	8.0%	5.8%	6.4%	11%*
Angiography	14%	15%	13%	14%
PCI	6.8%	6.6%	6.6%	7.2%
CABG	3.9%	4.3%	4.3%	3.3%

* p< 0.001
Conclusions: Despite similar rates of in-hospital and post-discharge coronary angiography and revascularization, unadjusted 1-year mortality was higher in patients with non-Q wave MI. This suggests that more aggressive therapy, including re-allocation of limited resources towards management of these high-risk patients, may be required.

1072-102 Multiple Clinical Risk Factors Do Not Preclude Immediate Exercise Testing in a Chest Pain Evaluation Unit

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BACKGROUND: In patients (Pts) presenting with chest pain suggestive of acute coronary syndrome (ACS), low risk is associated with a nonischemic initial electrocardiogram and negative serum cardiac marker. To further refine risk assessment of these Pts, additional clinical factors (ACF) have been utilized, as in the TIMI risk score. It has been suggested that Pts with aggregation of these risk factors should not be evaluated by an accelerated protocol in a chest pain evaluation unit (CPEU) because of a higher rate of ACS in this group. In our CPEU, we employ immediate exercise testing (IET) in Pts considered low or intermediate risk based on the initial ECG and cardiac serum marker. We, therefore, reviewed our experience in Pts with ACF.
METHODS: All Pts admitted to the CPEU had a normal initial ECG and negative initial serum troponin I or myoglobin. We determined the relationship to Pt outcome of $\geq$ 1 of the following ACF: previously documented coronary artery disease, advanced age (>65 yr) and presence of $\geq$ 3 CAD risk factors. Final diagnosis of ACS was based on evidence of CAD by further cardiac study (stress imaging or angiography) or occurrence of myocardial infarction, revascularization or cardiac death during CPEU stay or 30 day follow-up (FU) period.
RESULTS: IET was performed in 1808 consecutive Pts (919 men, 889 women, mean age 54 yr.) and was negative for ischemia in 65% (1168) of Pts, non-diagnostic (ND) in 24% (427) and positive in 12% (213). There were no adverse effects of IET. There were 1608 Pts with 0-1 ACF and 176 with 2-3 ACF. Multiple ACF predicted a positive or ND IET: 2 ACF (RR 4.2, CI 2.8-6.3) and 3 ACF (RR 2.7, CI 0.8-9.0). At 30 day FU there were no deaths and total cardiac events (non-Q MI + revascularization) were: Pts with 0-1 ACF - 1.7%; Pts with 2-3 ACF - 7.0%. Revascularization comprised 81% (30/37) of all events.
CONCLUSION: Aggregation of ACF is associated with an increase in positive IET and cardiac events. However, there were no deaths and the number of events was very low, the majority of which were revascularization. Patients with ACF can be safely managed by the accelerated protocol in our CPEU.

1072-103 Decline in Recurrent Ischemic Events After Myocardial Infarction: A 20-Year Community Study

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Background: Despite use of efficacious interventions for secondary prevention after myocardial infarction (MI), little is known about their effect on the long-term incidence of recurrent ischemic events after MI. This study tested the hypothesis that recurrent ischemic events after incident MI declined over time.
Methods: Standard epidemiological criteria were used to validate all incident MIs in Olmsted County between 1979 and 1998. Recurrent ischemic events defined as recurrent MI, unstable angina requiring hospitalization (UA) and sudden cardiac death (SCD), were identified through the community medical record.
Results: Between 1979 and 1998, 2277 incident MI cases occurred in Olmsted County (57% men; mean age, 67± 14 years). After 6.3± 5.3 years of follow-up, there were 586 recurrent MIs, 1025 UA, and 230 SCDs. The 5-year event-free survival was 77% (95% CI, 75%-79%) for recurrent MI, 53% (95% CI%, 51-55%) for UA, and 93% (95% CI, 92%-94%) for SCD.
The table presents the relative risk (RR) of recurrent ischemic events over time using subjects with MI between 1979 and 1983 as the referent. Overall, all recurrent ischemic events decreased over time, in earlier years largely due to decline in recurrent MI and UA whereas in most recent years, a marked decline in SCD occurred.
Conclusion: Over the past 2 decades, the occurrence of recurrent ischemic events after incident MI declined over time, most likely reflecting advances in therapy and secondary prevention.

RR of recurrent ischemic events after MI in different time periods

	1979-1983	1984-1988	1989-1993	1994-1998
Recurrent MI	1.00	0.85 (CI 0.68-1.07)	0.76 (CI 0.60-0.96)	0.79 (CI 0.62-1.02)
Unstable angina	1.00	0.84 (CI 0.71-1.01)	0.93 (CI 0.78-1.10)	0.81 (CI 0.68-0.97)
SCD	1.00	1.04 (CI 0.75-1.45)	0.87 (CI 0.61-1.26)	0.40 (CI 0.24-0.67)
Any event	1.00	0.89 (CI 0.76-1.04)	0.89 (CI 0.76-1.04)	0.78 (CI 0.66-0.93)

1072-104 The TIMI Risk Index Predicts Long-Term Mortality in Patients Admitted With Primary Unstable Angina

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Background: The Thrombolysis In Myocardial Ischemia (TIMI) risk index - [(heart rate x (age/10^2))/systolic blood pressure] - has been shown to be a strong and independent predictor of 30-day mortality in selected patients presenting with ST-elevation MI, but its utility for unselected patients presenting with unstable angina (UA) and its ability to predict long term outcomes are unknown.
Methods: We updated a pre-existing database of 280 unselected patients with primary UA admitted via the Emergency Department to a large, urban academic hospital in 1991-1992. We calculated the TIMI risk index for each patient based on values at presentation and used Cox models to assess the ability of the risk index to predict long-term mortality.
Results: There were 275 patients (age 66±12 years, 33% women) who survived to hospital discharge. Post-discharge death was documented in 134 patients. Vital status was known for >99% of patients at 1 year, 86% at 5 years and 77% at 10 years. Median follow-up for patients who did not die was 9.4 years. The mean risk index was 23±10 points (range 5-65). The risk index was a strong predictor of 1-year and 10-year mortality (p=0.002). For each 10-point increase in the risk index, the hazard ratio for one year mortality was 1.61 (95% CI 1.23 – 2.10) and the hazard ratio for 10 year mortality was 1.72. (95% CI 1.51 – 1.96). We found optimal discrimination for 10-year mortality using a cut-point of 21 points (=21 vs. <21; hazard ratio (HR) 4.3, 95% CI 2.9-6.4). Compared with the lowest quintile of risk index, the HR for 10-year mortality for the highest quintile was 5.5 (95% CI 3.0-10.0). After multivariable adjustment for other known predictors of 10-year mortality (CHF, elevated creatinine or leukocytosis at presentation, history of diabetes mellitus or MI), the risk index remained a significant predictor of 10-year mortality (HR for 10-point increase: 1.5, 95% CI 1.3-1.8).